

In the Claims:

1. (Currently Amended) Apparatus for measuring blood pressure, comprising a generally tubular constrictable sleeve or cuff for a limb of a person, a source for fluid pressure, a detector for providing measurements of slowly varying static pressures in said sleeve or cuff, and microphone means adapted for being arranged, in use, in proximity to an artery, wherein the cuff is at least partly enclosed in two essentially concave shell parts displaying a stiffness in an axial direction, said shell parts being openable against a restoring force, [[and]] wherein the microphone means comprises a linear array of microphone elements disposed on a joint support which emulates a universal joint in one shell part essentially perpendicular to the longitudinal axis of such shell part and near the lower end; and wherein an inelastic strap attached to one shell part is provided to close a gap between the shell parts.

2. (Previously Presented) Apparatus according to claim 1, wherein signal selection means of the diversity reception type are used to select the microphone that provides the best signal-to-noise ratio.

3. (Previously Presented) Apparatus according to claim 1, wherein the microphone signal is amplified and made available to an electroacoustic converter for enabling listening to the signal.

4. (Previously Presented) Apparatus according to claim 3, wherein the signal is output via a built-in speaker in the apparatus.

5. (Previously Presented) Apparatus according to claim 3, wherein the signal is output via a wireless link to a receiver connected to earpieces adapted to be worn, in use, by an auscultating physician.

6. (Previously Presented) Apparatus according to claim 1, further comprising signal processing means for combining information derived from measurements of slowly varying

static pressures with information from said microphone means in order to obtain a numerical value for a blood pressure.

7. (Cancelled).

8. (Currently Amended) Apparatus according to claim 1, [[7,]] wherein the strap is provided with means locking to the other shell part in conjunction with the overlapping of said strap and said other shell part.

9. (Previously Presented) Apparatus according to claim 8, wherein the amount of overlap between the strap and the shell part is used as a circumference measure for correcting the reading of blood pressure.

10. (Previously Presented) An apparatus according to claim 9, wherein the overlap is measured capacitively between an electrode or a plurality of electrodes fixed to the cuff and an electrode or a plurality of electrodes fixed to the strap.

11. (Currently Amended) Apparatus according to claim 1, for measuring blood pressure, comprising a generally tubular constrictable sleeve or cuff for a limb of a person, a source for fluid pressure, a detector for providing measurements of slowly varying static pressures in said sleeve or cuff, and microphone means adapted for being arranged, in use, in proximity to an artery, wherein the cuff is at least partly enclosed in two essentially concave shell parts displaying a stiffness in an axial direction, said shell parts being openable against a restoring force, [[and]] wherein the microphone means comprises a linear array of microphone elements disposed on a joint support which emulates a universal joint in one shell part essentially perpendicular to the longitudinal axis of such shell part and near the lower end; and wherein the shells are fitted on hinge parts connected to handle parts operable by one hand.

12. (Previously Presented) Apparatus according to claim 1, wherein, in addition to a stiffness in the longitudinal direction, the shell structure displays a resilience in the circumferential direction.

13. (Previously Presented) Apparatus according to claim 12, further comprising a hinge that is a continuous resilient part joining the shell parts.

14. (Previously Presented) Apparatus according to claim 11, wherein the shell parts are integral with the hinge parts, forming one continuous sheet of material.

15. (Previously Presented) Apparatus according to claim 14, wherein the continuous sheet of material assumes a generally frusto-conical shape in its closed state.

16. (Previously Presented) Apparatus according to claim 11, wherein mechanical actuating means fitted in proximity to the hinge parts compress one shell part towards the other during measurement.

17. (Previously Presented) Apparatus according to claim 16, wherein the mechanical actuating means comprises an air cylinder and levers.

18. (Previously Presented) Apparatus according to claim 16, wherein the mechanical actuating means comprises strings fitted near the inner side of each shell part and disposed perpendicular to the longitudinal axis of such shell part.

19. (Previously Presented) Apparatus according to claim 1, wherein the constrictable sleeve or cuff forms an inner lining to the shell parts, providing an inflatable main air chamber.

20. (Currently Amended) Apparatus according to claim 1, ~~[[7,]]~~ wherein the constrictable sleeve or cuff forms an inner lining to the shell parts, providing an inflatable

main air chamber, and wherein the strap is provided with air chambers disposed essentially perpendicular to the orientation of the shells and communicating with the main air chamber.

21. (Currently Amended) ~~Apparatus according to claim 1,~~ for measuring blood pressure, comprising a generally tubular constrictable sleeve or cuff for a limb of a person, a source for fluid pressure, a detector for providing measurements of slowly varying static pressures in said sleeve or cuff, and microphone means adapted for being arranged, in use, in proximity to an artery, wherein the cuff is at least partly enclosed in two essentially concave shell parts displaying a stiffness in an axial direction, said shell parts being openable against a restoring force, [[and]] wherein the microphone means comprises a linear array of microphone elements disposed on a joint support which emulates a universal joint in one shell part essentially perpendicular to the longitudinal axis of such shell part and near the lower end; and wherein joint support emulates a universal joint by means of a foam pad.

22. (Previously Presented) Apparatus according to claim 1, wherein joint support emulates a universal joint by means of a separate air chamber fitted between the cuff and the microphone array.

23. (Cancelled).

24. (Cancelled).

25. (Previously Presented) Apparatus according to claim 1, wherein said sleeve or cuff is adapted to fit an arm of a person.

26. (Previously Presented) Apparatus according to claim 1, wherein said sleeve or cuff is adapted to fit an leg of a person.